

Appl. No. 10/735,613
Amendment dated: September 26, 2005
Reply to OA of: June 24, 2005

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-5 (canceled).

6(currently amended). A permanent magnet ring formed by arranging a plurality of unit permanent magnets ~~(21a, 21b, 21c ...)~~, wherein each of the unit permanent magnets ~~(21a, 21b, 21c ...)~~ is formed in a cylindrical shape, a spherical shape, a flat shape, or a disc shape ~~or the like~~, and a predetermined number of the unit permanent magnets ~~(21a, 21b, 21c ...)~~ are magnetically attracted to each other on respective side surfaces $[(R)]$ so as to be formed in a ring shape, wherein each of a plurality of said unit permanent magnets ~~(21a, 21b, 21c ...)~~ is a rare earth magnet ~~such as a neodymium iron boron magnet, a samarium cobalt magnet and the like~~, and is a uniaxial anisotropic magnet in which an N pole or an S pole is formed on one part of the side surface $[(R)]$ orthogonal to an easily magnetizing direction ~~(x→x)~~, which is formed at a time of molding a raw material including a rare earth element in a magnetic field, by magnetizing along said easily magnetizing direction ~~(x→x)~~ after sintering, and the S pole or the N pole is formed on another part of the side surface $[(R)]$ opposite to said one part of the side surface, the side surface $[(R)]$, on which the magnetic poles of the unit permanent magnet are formed, is formed to be a curved surface, and a predetermined number of the unit permanent magnets ~~(21a, 21b, 21c ...)~~, which are the uniaxial anisotropic magnets, are magnetically attracted to each other in a line contact aspect or a point contact aspect on the curved side surfaces $[(R)]$ on which the magnetic poles are formed, so as to be formed in a ring shape having a predetermined size.

7(currently amended). A permanent magnet ring as claimed in claim 6, wherein said unit permanent magnets ~~(21a, 21b, 21c ...)~~ are formed in a circular cross sectional

Appl. No. 10/735,613
Amendment dated: September 26, 2005
Reply to OA of: June 24, 2005

shape, and formed in a cylindrical shape as a whole, and a predetermined number of the unit permanent magnets (~~21a, 21b, 21c...~~) are magnetically attracted to each other in a line contact aspect on the curved side surfaces $[(R)]$ on which the magnetic poles are formed, so as to be formed in a ring shape.

8(currently amended). A permanent magnet ring as claimed in claim 6, wherein said unit permanent magnets (~~21a, 21b, 21c...~~) are formed in a spherical shape, and a predetermined number of the unit permanent magnets (~~21a, 21b, 21c...~~) are magnetically attracted to each other in a point contact aspect on the curved side surfaces $[(R)]$ on which the magnetic poles are formed, so as to be formed in a ring shape.

9(currently amended). A permanent magnet ring as claimed in claim 6, wherein said unit permanent magnets (~~21a, 21b, 21c...~~) are formed in a flat shape, and a predetermined number of the unit permanent magnets (~~21a, 21b, 21c...~~) are magnetically attracted to each other in a line contact aspect on the curved side surfaces $[(R)]$ on which the magnetic poles are formed, so as to be formed in a ring shape.

10(original). A permanent magnet ring as claimed in any one of claims 6, 7, 8 and 9, wherein a plated layer is formed on a surface of said unit permanent magnet, and a transparent siliceous coating layer is formed over the plated layer.

11(canceled).

12(new). The permanent magnet ring as claimed in claim 6, wherein the rare earth magnet is a neodymium iron boron magnet.

13(new). The permanent magnet ring as claimed in claim 6, wherein the rare earth magnet is a samarium cobalt magnet.